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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

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U.S. DISTRICT COURT
DISTRICT OF COLORADO

2000 APR 18 PM 4:33

Civil Action No.

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JAMES R. HANSPEAKER
CLERK

BY _____ DEP. CLK

IN THE MATTER OF

RICO ARGENTINE MINE:
ST. LOUIS TUNNEL AND
ASSOCIATED TREATMENT PONDS,
RICO, COLORADO

**APPLICATION OF THE UNITED STATES
FOR WARRANT TO DETERMINE THE NEED FOR
AND TO UNDERTAKE RESPONSE ACTION PURSUANT TO
THE COMPREHENSIVE ENVIRONMENTAL RESPONSE,
COMPENSATION, AND LIABILITY ACT,
42 U.S.C. §§ 9601 ET SEQ.**

COMES NOW the United States of America, by and through the United States Attorney for the District of Colorado and the Environment and Natural Resources Division, United States Department of Justice, and pursuant to the authority of the Attorney General of the United States, and acting on behalf of the United States Environmental Protection Agency ("EPA"), applies to this Court for a warrant authorizing EPA, its employees, officers, and authorized representatives to enter into and upon the Rico Argentine Mine's St. Louis Tunnel and its associated treatment ponds (the "Property") located in or near the Town of Rico, Colorado, and owned by Wayne Webster, an individual, for the purpose of determining the need for response, or choosing or taking a response action, and in support thereof states as follows:

The United States on behalf of EPA submits this application pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("CERCLA"), 42 U.S.C. §§ 9601 et seq.

RELATED LITIGATION

The owner of the Property, Wayne Webster, is a defendant in an ongoing enforcement action initiated by the United States in this Court under the Clean Water Act entitled United States of America and the State of Colorado v. Rico Development Corporation, Wayne Webster and Virginia Sell, Civil Action No. 99-M-1386. Civil Action 99-M-1386 is currently subject to a stay of proceedings which was jointly sought by the parties in order that the parties can engage in settlement discussions. The stay expires on May 2, 2000.

The circumstances that have given rise to and are the subject to this application for administrative warrant are not the subject of Civil Action 99-M-1386 and have arisen outside the context of that litigation.

STATUTORY AUTHORITY FOR ACCESS

EPA's authority to enter the Property for the purpose of determining the need for response, or choosing or taking a response action is found in Section 104(e) of CERCLA, 42 U.S.C. § 9604(e). Section 104(e) of CERCLA provides as follows:

(1) Action authorized

Any officer, employee, or representative of the President, duly designated by the President, is authorized to take action under paragraph (2), (3), or (4) (or any combination thereof) at a vessel, facility, establishment, place, property, or location or, in the case of paragraph (3) or (4), at any vessel, facility, establishment, place, property, or location which is adjacent to the vessel,

facility, establishment, place, property, or location referred to in such paragraph (3) or (4). Any duly designated officer, employee, or representative of a State or political subdivision under a contract or cooperative agreement under subsection (d)(1) of this section is also authorized to take such action. The authority of paragraphs (3) and (4) may be exercised only if there is a reasonable basis to believe there may be a release or threat of release of a hazardous substance or pollutant or contaminant. The authority of this subsection may be exercised only for the purposes of determining the need for response, or choosing or taking any response action under this subchapter, or otherwise enforcing the provisions of this subchapter.

* * *

(3) Entry

Any officer, employee, or representative described in paragraph (1) is authorized to enter at reasonable times any of the following:

(A) Any vessel, facility, establishment, or other place or property where any hazardous substance or pollutant or contaminant may be or has been generated, stored, treated, disposed of, or transported from.

(B) Any vessel, facility, establishment, or other place or property from which or to which a hazardous substance or pollutant or contaminant has been or may have been released.

(C) Any vessel, facility, establishment, or other place or property where such release is or may be threatened.

(D) Any vessel, facility, establishment, or other place or property where entry is needed to determine the need for response or the appropriate response or to effectuate a response action under this subchapter.

(4) Inspection and samples

(A) Authority

Any officer, employee or representative described in paragraph (1) is authorized to inspect and obtain samples from any vessel, facility, establishment, or other place or property referred to in paragraph (3) or from any location of any suspected hazardous substance or pollutant or contaminant. Any such officer, employee, or representative is authorized to inspect and obtain samples of any containers or labeling for suspected hazardous substances or pollutants or contaminants. Each such inspection shall be completed with reasonable promptness.

(B) Samples

If the officer, employee, or representative obtains any samples, before leaving the premises he shall give to the owner, operator, tenant, or other person in charge of the place from which the samples were obtained a receipt describing the sample obtained and, if requested, a portion of each such sample. A copy of the results of any analysis made of such samples shall be furnished promptly to the owner, operator, tenant, or other person in charge, if such person can be located.

(5) Compliance orders

(A) Issuance

If consent is not granted regarding any request made by an officer, employee, or representative under paragraph (2), (3), or (4), the President may issue an order directing compliance with the request. The order may be issued after such notice and opportunity for consultation as is reasonably appropriate under the circumstances.

(B) Compliance

The President may ask the Attorney General to commence a civil action to compel compliance with a request or order referred to in subparagraph (A). Where there is a reasonable basis to believe there may be a release or threat of a release of a hazardous substance or pollutant or contaminant, the court shall take the following actions:

- (i) In the case of interference with entry or inspection, the court shall enjoin such interference or direct compliance with orders to prohibit interference with entry or inspection unless under the circumstances of the case the demand for entry or inspection is arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law.

* * *

The court may assess a civil penalty not to exceed \$25,000 for each day of noncompliance against any person who unreasonably fails to comply with the provisions of paragraph (2), (3), or (4) or an order issued pursuant to subparagraph (A) of this paragraph.

42 U.S.C. § 9604(e) (emphasis provided).

In accordance with the statutory language quoted above, the purpose of determining the need for response, or choosing or taking a response action under CERCLA (including inspecting and obtaining samples), officers, employees and representatives of EPA are authorized to enter any vessel, facility, establishment, or other place or property where any hazardous substance or pollutant or contaminant may be or has been generated, stored, treated, disposed of, or transported from, or to which a hazardous substance or pollutant or contaminant has been or may have been released, or where such release is or may be threatened, or any vessel, facility, establishment, or other place or property where entry is needed to determine the need for response or the appropriate response or to effectuate a response action under subchapter I of CERCLA, 42 U.S.C. §§ 9601 - 9626.

**FACTUAL BASIS FOR ACCESS AND
RESPONSE ACTIVITIES TO BE UNDERTAKEN**

The Rico Argentine Mine is located in the San Juan Mountains in Dolores County Colorado. (Declaration of Tien Nguyen, On-Scene Coordinator, EPA, Region VIII, Denver, Colorado, ¶ 4, attached hereto as Exhibit 1.) The mine is approximately one mile north of the Town of Rico, Colorado, and is near the Dolores River. (Exhibit 1, ¶ 4.) The Rico Argentine Mine is a complex of inactive and abandoned tunnels, water treatment plant and settling ponds. (Exhibit 1, ¶ 5.) The St. Louis Tunnel is one of the abandoned tunnels of the Rico Argentine Mine. (Exhibit 1, ¶ 6.) Effluent from the St. Louis Tunnel flows into a series of settling ponds located immediately downgradient from the St. Louis Tunnel. (Exhibit 1, ¶ 7.) The settling ponds are immediately adjacent

to the Dolores River. (Exhibit 1, ¶ 7.) Hazardous substances such as the heavy metals, cadmium, lead and arsenic are being released from the St. Louis Tunnel into the settling ponds.¹ (Exhibit 1, ¶¶ 13 - 14.) The uppermost settling ponds contain sediment and sludges laden with the heavy metals noted above. (Exhibit 1, ¶ 14.) The uppermost settling pond is full and its riverside embankment has begun to erode. (Exhibit 1, ¶ 16.) The erosion allows water, sediment and sludge from the settling pond to flow directly into the Dolores River. (Exhibit 1, ¶ 16.) The erosion in the uppermost settling pond appears to be increasing. (Exhibit 1, ¶¶ 18 - 19; Exhibit 2E.) The conduit from the uppermost pond to the downgradient pond is blocked, thereby preventing effluent from the uppermost pond from flowing freely into the downgradient ponds. (Exhibit 1, ¶ 17.) As the heavy snowpack above the ponds melts, the pressure on the ponds will increase. (Exhibit 1, ¶ 18.) If action is not taken immediately to allow the effluent from the uppermost pond to flow freely into the downgradient ponds, the riverside embankment of the uppermost pond may collapse. (Exhibit 1, ¶ 19.) If the uppermost settling pond's riverside embankment collapses, tons of sediments laden with hazardous substances such as the heavy metals cadmium, lead and arsenic will be discharged directly into the Dolores River. (Exhibit 1, ¶ 19.)

Mr. Nguyen's observations regarding the erosion of the uppermost settling pond are confirmed in an April 11, 2000 e-mail from Eric Heil, Rico Town Manager and

¹ On April 14, 2000, Tien Nguyen visited the Rico Argentine Mine and took samples. The samples taken by Mr. Nguyen are not a basis for the within Application (Exhibit 1, ¶ 11.)

Attorney (Declaration of Sheldon H. Muller, Enforcement Attorney, EPA, ¶ 2, Exhibit 2A, attached hereto as Exhibit 2.) As Mr. Heil's e-mail states, one point of erosion in the uppermost pond has almost doubled between April 4, 2000 and April 11, 2000.

(Exhibits 2B - 2D, photographs that accompanied Mr. Heil's e-mail.)

The response activities that EPA seeks to carry out under this warrant include the following:

1. To visually inspect all places where a hazardous substance, pollutant or contaminant may be or has been generated, stored, treated, disposed of, or transported from, or to which a hazardous substance or pollutant or contaminant has been or may have been released, or where such release is or may be threatened, or to determine the need for response or the appropriate response or to effectuate a response action under CERCLA.
2. To reinforce the embankment of the uppermost pond and any other ponds in the series of treatment ponds that were formerly used to treat effluent that discharges from the Rico Argentine Mine's St. Louis Tunnel to prevent sludges and sediments from the pond(s) from discharging into the Dolores River.
3. To take necessary steps to allow the effluent to move freely from the St. Louis Tunnel to the uppermost pond and from there to each pond in succession in order to relieve the pressure on the embankments of the ponds.
4. To remove any obstructions preventing effluent from moving freely from the St. Louis Tunnel to the uppermost pond and from there to each

pond in succession, including any animals that may be causing such obstructions.

5. To take any samples deemed appropriate.

6. To take photographs, including videotape, to document EPA's activities.

7. To take any further activity deemed necessary by EPA for the purpose of determining the need for response, or to effectuate a response under CERCLA.

The ponds in question and the St. Louis Tunnel are in a state of virtual abandonment. (Exhibit 1, ¶¶ 5 AND 6.) Accordingly, no significant disruption or interference with any ongoing activities will occur as a result of EPA's actions.

Although EPA may be entitled to a warrantless entry upon the Property under CERCLA (and the United States does not waive such a legal position by this application), in order to ensure peaceful acquiescence by the owner of the Property to the EPA action, EPA applies for this warrant.

**EPA WAS DENIED ENTRY FOR PURPOSES OF
DETERMINING THE NEED FOR RESPONSE AND
CHOOSING OR TAKING A RESPONSE ACTION**

On April 13, 2000, counsel for EPA Faxed a Consent for Access To Property form to counsel for the owner of the Property, Wayne Webster. (Exhibit 2E.) On April 14, 2000, counsel for Wayne Webster faxed Mr. Webster's response to counsel for EPA. (Exhibit 2F.)

Mr. Webster's consent for access is far too limited to allow EPA to carry out those activities it is entitled to undertake pursuant to CERCLA. Specifically, Mr. Webster stated that "EPA or CO. Health Dep't. has my permission to go on the property in question to catch the beaver and remove debris from ponds brought in by the beaver." (See, Exhibit 2F.) This "authorization" is plainly inadequate since it, *inter alia*, (1) does not clearly authorize EPA to take other measures that may be necessary to allow effluent to flow freely from pond to pond; does not authorize EPA to reinforce the embankment to the uppermost pond or any other pond that may begin to erode; and (3) does not authorize EPA to take other action it may deem necessary.

STANDARD FOR ISSUANCE OF WARRANT

The issuance of an administrative warrant requires probable cause, but the standard for finding that probable cause exists in an administrative context is lower than that required in a criminal context. United States v. Lawson, 502 F.Supp. 158, 165 (D.Md. 1982). A lower standard of probable cause is used in administrative cases such as this case, because there is less intrusion into an individual's privacy, and whatever intrusion may exist is outweighed by the public's interest in the regulatory program. See Id.; Burkart Randall Division of Textron, Inc. v. Marshall, 625 F.2d 1313, 1319 (7th Cir. 1980).

To justify the issuance of an administrative warrant for access, EPA need only provide either specific evidence justifying entry or "reasonable legislative, administrative, or judicially prescribed standards" for such access. See Michigan v. Clifford, 464 U.S. 287, 294 n.5 (1984); see also Marshall v. Barlow's Inc., 436 U.S.

307, 321 (1978) ("[R]easonableness is . . . the ultimate standard"); West Point-Pepperell, Inc. v. Donovan, 689 F.2d 950, 958 (11th Cir. 1982) (there must be a "showing of specific evidence sufficient to support a reasonable suspicion of a violation"); National-Standard Co. v. Adamkus, 881 F.2d 352, 360 (7th Cir. 1989) (it is not necessary that EPA have conclusive evidence). EPA meets both Constitutional criteria for issuing an administrative warrant: (1) EPA has obtained specific evidence of a release or threat of release of a hazardous substance or pollutant or contaminant; and (2) EPA is proceeding under reasonable legislative and administrative standards in carrying out the inspection.

Section 104(e) of CERCLA vests broad access authority in EPA where there is a "reasonable basis to believe there may be a release or threat of release of a hazardous substance or pollutant or contaminant." 42 U.S.C. § 9604(e).

EPA has demonstrated that access is necessary and appropriate to effectuate the statutory purposes of CERCLA, and to prevent harm to human health and to the environment.

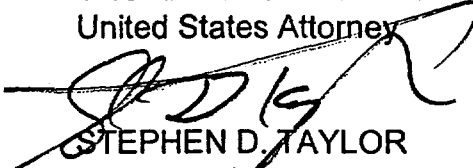
EPA estimates that access to the Property will be required for approximately seven (7) working days.

WHEREFORE, the United States, by the Authority of the Attorney General of the United States, through EPA, respectfully requests that an administrative warrant be issued in accordance with this application.

DATED THIS 18th day of April, 2000.

Respectfully submitted,

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EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Civil Action No.

IN THE MATTER OF

RICO ARGENTINE MINE:
ST. LOUIS TUNNEL AND
ASSOCIATED TREATMENT PONDS,
RICO, COLORADO

DECLARATION OF TIEN NGUYEN

I, Tien Nguyen, make the within Declaration pursuant to 28 U.S.C. § 1746.

1. I make this declaration in support of the APPLICATION OF THE UNITED STATES FOR WARRANT TO DETERMINE THE NEED FOR AND TO UNDERTAKE RESPONSE ACTION PURSUANT TO THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT, 42 U.S.C. §§ 9601 ET SEQ. ("Application").

2. I base this declaration upon personal observations and upon my review of U.S. Environmental Protection Agency ("EPA") records.

3. I am currently employed as an On-Scene Coordinator with EPA, Region VIII, in Denver Colorado. My job duties include determining the need for response and choosing and supervising the taking of response actions under the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. §§ 9601 et seq. ("CERCLA"). I have been in this position for approximately 13 years.

4. The Rico Argentine Mine is located in the San Juan Mountains in Dolores County, Colorado. The mine is approximately one mile north of the Town of Rico, Colorado and is near the Dolores River.

5. The Rico Argentine Mine is a complex of inactive and abandoned tunnels, a water treatment plant and settling ponds.

6. The St. Louis Tunnel is one of the abandoned tunnels of the Rico Argentine Mine.

7. Effluent from the St. Louis Tunnel flows into a series of settling ponds located immediately downgradient from the St. Louis Tunnel. The settling ponds are immediately adjacent to the Dolores River.

8. An inactive treatment plant is located at the St. Louis Tunnel. When the treatment plant was operational, lime was added to the tunnel effluent to precipitate the metals out of the effluent causing the metals to settle at the bottom of the settling ponds.

9. I visited the Rico Argentine Mine on April 14, 2000. Specifically, I observed the St. Louis Tunnel and its associated settling ponds. I was accompanied by the Rico Town Manager, the Mayor of Rico, a member of the Rico Board of Trustees and the Rico Fire Department, and EPA contractors.

10. During my visit on April 14, 2000, EPA contractors at my direction took sediment and water samples from several locations. Samples were taken: (1) between the St. Louis Tunnel and the uppermost settling pond, (2) in the Dolores River,

upstream of the settling ponds, (3) at the outfall to the Dolores River from the last in the series of settling ponds, (4) from the area of erosion in the riverside embankment of the uppermost settling pond, and (5) in the Dolores River, downstream from the uppermost pond.

11. Although the preliminary results of the sediment sample taken between the St. Louis Tunnel and the uppermost pond confirm the results of the 1996 sampling, my opinions and observation made in support of this Application would be the same, if I had not taken the samples on April 14, 2000.

12. Prior and subsequent to my visit to the Rico Argentine Mine, I reviewed the following information relating to the effluent from the St. Louis Tunnel that flows into the series of settling ponds located immediately downgradient from the St. Louis Tunnel:

- (1) Superfund Technical Assessment and Response Team Analytical Results Report, dated June 19, 1996 (Exhibit 1-A);
- (2) an April 4, 2000 letter from Eric Heil, Rico Town Manager and Attorney and 3 photographs that accompanied the letter (Exhibits 1B - 1E, respectively).

13. The information I reviewed indicates that hazardous substances, including the heavy metals cadmium, lead and arsenic are being released from the St. Louis Tunnel into the settling ponds and, in turn, into the Dolores River. These documents also indicate that the uppermost settling pond contains sludges and sediments containing the heavy metals referred to above.

14. The results from sludge and sediment samples of the uppermost pond taken in 1996 reveal the following levels of hazardous substances:

Cadmium: 227 parts per million ("ppm")

Lead: 838 ppm

Arsenic: 49.4 ppm

These levels are extremely high and, if released into the Dolores River, may pose a threat to human health and the environment.

15. As the letter and photos from the Rico Town Manager and Attorney indicate, the riverside embankment of the uppermost settling pond is deteriorating and is in jeopardy of collapsing.

16. During my visit to the Rico Argentine Mine, I confirmed the information provided to EPA by the Rico Town Manager and Attorney. I observed that the uppermost settling pond is full and that its riverside embankment is eroding, allowing water and sediment from the pond to flow directly into the Dolores River.

17. The conduit from the uppermost settling pond to the downgradient settling pond is blocked, preventing the effluent from the uppermost pond from flowing freely into the downgradient pond.

18. The snowpack above the settling ponds is heavy. As the weather continues to warm, the melting of the snowpack will accelerate and the pressure on the settling ponds will increase. The erosion I observed in the riverside embankment of the uppermost pond will accelerate.

19. If action is not taken immediately to allow the effluent from the uppermost settling pond to flow freely into the downgradient settling pond, the riverside embankment of the uppermost pond may collapse, allowing tons of heavily contaminated sludge and sediment in the uppermost pond to be released into the Dolores River.

20. It may also be necessary to restore the integrity of the riverside embankment of the uppermost pond to prevent its collapse.

DECLARATION

I, Tien Nguyen, declare under penalty of perjury that the foregoing DECLARATION OF TIEN NGUYEN is true and correct.

Executed on this 18TH day of April, 2000.


TIEN NGUYEN

EXHIBIT 1A

START

Superfund Technical Assessment and Response
Team - Region VIII

URS

OPERATING SERVICES, INC.

United States

Environmental Protection Agency

Contract No. 68-W5-0031



ANALYTICAL RESULTS REPORT

RICO ARGENTINE
Rico, Dolores County, Colorado

TDD #9511-0015

JUNE 19, 1996



**ANALYTICAL RESULTS REPORT for
EXPANDED SITE INSPECTION**

**Rico-Argentine
Rico, Dolores County, Colorado**

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URS Operating Services, Inc.
START, EPA Region VIII
Contract No. 68-W5-0031

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Site Inspection Data Summary
Validation Reports and Laboratory Data (under separate cover)

1.0 INTRODUCTION

This Analytical Results Report (ARR) of the Rico-Argentine site in Rico, Dolores County, Colorado (CERCLIS ID # COD980952519), has been prepared to satisfy the requirements of Technical Direction Document (TDD) No. 9511-0015 issued to URS Operating Services, Inc. (UOS) on November 22, 1995, and amended by TDD No. 9511-0015A on January 25, 1996, by the Region VIII office of the U.S. Environmental Protection Agency (EPA). Field work at the Rico-Argentine site was conducted during the week of September 11 through 15, 1995, and followed the Expanded Site Inspection (ESI) format (U.S. Environmental Protection Agency (EPA) 1992).

Field activities were conducted by URS Consultants, Inc. (URS) and followed the applicable URS Technical Standard Operating Procedures (TSOPs). Field activities specifically included collecting 45 environmental samples comprised of 16 source samples, 11 surface water and 11 sediment samples, 6 residential soil samples, and 1 groundwater sample, plus 9 field Quality Assurance/Quality Control (QA/QC) samples (in addition to the laboratory matrix spike/matrix spike duplicate (MS/MSD) (Table 3). Non-sampling activities included gauging the flow of Silver Creek, Scotch Creek and the Dolores River, describing and delineating wetlands for approximately one mile along the Dolores River downstream of the confluence with Silver Creek, and measuring water quality parameters (pH, temperature and conductivity) at five non-sampling locations (Figure 2).

The samples were shipped through the contract laboratory program (CLP), routine analytical services (RAS). Samples that were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs) and pesticides/PCBs were sent to RECRA Environmental, Columbia, Maryland. Samples that were analyzed for cyanide and total or dissolved metals were sent to Southwest Labs of Oklahoma at Broken Arrow, Oklahoma. This ARR is intended to be used in conjunction with the Rico-Argentine Field Sampling Plan (FSP) (URS Consultants, Inc. (URS) 1995a) and the Rico-Argentine Sample Activities Report (URS 1995b) (Appendix A).

2.0 OBJECTIVES

The purpose of the ESI was to gather data pertinent to the evaluation of the Rico-Argentine site with regard to the EPA's Hazard Ranking System (HRS) criteria. The specific objectives of the ESI were to:

- Acquire and utilize non-sampling data (i.e., existing reports, analytical data or physical measurements) documenting past releases from the site source areas;
- Identify and delineate receptor targets for the surface water and groundwater pathways;
- Determine resident populations subject to contamination via the soil exposure pathway;
- Document potential release of site contaminants to users of groundwater from the alluvial aquifer;
and
- Document potential releases of site contaminants to targets along the surface water pathway.

3.0 BACKGROUND INFORMATION

3.1 SITE LOCATION AND DESCRIPTION

The Rico-Argentine site is located in the Rico Mountains of southwestern Colorado and encompasses approximately 75 acres of settling ponds and tailings piles north and east of the town of Rico in Eastern Dolores County, Colorado (Figures 1 and 2). The legal description of the site is the southeast quarter of Section 25, T. 40 N, R. 11 W. The approximate site coordinates are 37° 42' 05" North latitude and 108° 01' 39" West longitude (U.S. Geological Survey (USGS) 1960). The Rico-Argentine site can be reached by proceeding south from Telluride, Colorado, on State Highway 145 over Lizard Head Pass to the town of Rico, or by proceeding north from Cortez, Colorado, on State Highway 145 to the town of Rico.

3.2 SITE DESCRIPTION

The Rico-Argentine site is an inactive mining and milling operation located in two drainages, the Dolores River and its tributary Silver Creek. Part of the site is within the northern and eastern city limits of Rico, Colorado. One part of the site extends northeastward up the Silver Creek drainage, and another part extends northward along the east bank of the Dolores River drainage (Figure 2). The Rico-Argentine Mill, Blain Tunnel and two large tailings piles are located adjacent to Silver Creek, approximately one mile east northeast of the town of Rico (Figure 2). The St. Louis Tunnel adit, an inactive sulfuric acid plant, two inactive cyanide heap leach basins, 11 settling ponds, and two hot spring feed ponds are located along the east bank of the Dolores River approximately 1/4 to 3/4 miles north of the town of Rico (Figure 2). Water from the underground mine working associated with the Rico-Argentine site drains from the mine to the St. Louis Tunnel adit, where it flows into the settling pond system prior to discharging into the Dolores River (URS 1995a; URS 1995b).

The Rico-Argentine has a National Pollutant Discharge Elimination System (NPDES) permit (#CO-0029793) dating from 1976, and has frequently been in violation of permit standards (U.S. Environmental Protection Agency (EPA) 1994). The discharge has also been regulated under the Colorado Pollutant Discharge Elimination System (CPDES). The discharge averages approximately 1.1 million to 1.5 million gallons per day (EPA 1994).

The Rico, Colorado, area has been heavily mined and several potential sources of contamination, primarily settling ponds and tailings piles, have been identified along Silver Creek and the Dolores River (URS 1995a). The exact origin of all of the specific potential sources is unknown. The area surrounding the Rico-Argentine site is primarily Bureau of Land Management (BLM) land located within the San Juan National Forest, with surrounding peaks reaching 14,000 feet above mean sea level (msl) and summits in the local Rico Mountains reaching more than 12,000 feet above msl. The town of Rico and the settling ponds along the east bank of the Dolores River are at 8,800 feet above msl and the Rico-Argentine Mill and tailings along Silver Creek are at 9,200 feet above msl (USGS 1960).

3.3 SITE HISTORY AND PREVIOUS WORK

The Rico area has an extended mining history of which a detailed account can be found in the Site Inspection Prioritization Report (URS 1994). Early mining activity in the Rico area began in the 1860s when several claims were staked in the Pioneer District at the confluence of Silver Creek with the Dolores River. Silver production reached a peak in 1893. In 1902, all of the important mines in the district were consolidated under the United Rico Mine Company which primarily produced base metal ores. The Rico-Argentine Mining Company, was formed in 1915 to produce base metal ores. A custom mill was built in 1926 by the International Smelting Company, a subsidiary of Anaconda Mining Company. Base metal ore production peaked in 1927 but by 1928 the mill had shut down and by 1932 all mining activity in the area had ceased (USGS 1974).

The Rico-Argentine Mining Company resumed sporadic mining activities in 1934 and resumed steady production in 1939 (State of Colorado, Department of Natural Resources, Bureau of Mines (BOM) 1939a; BOM 1939b). A sulfuric acid plant located north of the settling ponds along the Dolores River was operated between 1955 and 1964 (USGS 1974). All mining operations again ceased in 1971 and most of the mine workings were allowed to flood and drain through the St. Louis Tunnel (BOM 1971).

The Rico-Argentine Mining Company built a 300-foot by 500-foot leach pad next to the old sulfuric acid plant in 1973. A cyanide solution was used to leach silver and gold from raw ore, and an overflow of an unknown quantity of leaching liquor to the Dolores River occurred sometime in 1974 (BOM 1974). In 1975 an additional cyanide leach pad was constructed in a settling pond originally used by the acid plant (BOM 1975).

A Notice of Violation (NOV) and a Cease and Desist Order (CDO) were issued to the Rico-Argentine Mining Company in 1990 by the Colorado Department of Health and Water Quality Control Division because of the company's failure to meet the compliance of its NPDES permit (EPA 1994).

A review of the Colorado Department of Public Health and the Environment Water Quality Control Division's files, for the Rico-Argentine CDPS Permit No. CO-0029793, revealed the following discharge permit condition violations in 1995 (State of Colorado Department of Public Health and the Environment (CDPHE) 1988):

TABLE 1
Discharge Permit Condition Violations in 1995
(reported in mg/l)

Report Period	Parameter	Reported Results	Permit Conditions
04/95	Total Recoverable Cadmium	0.0035 (30-day avg.)	0.0004 (30-day avg.)
04/95	Total Recoverable Zinc	0.57 (30-day avg.)	0.237 (30-day avg.)
05/95	Total Recoverable Cadmium	0.0065 (30-day avg.)	0.0004 (30-day avg.)
05/95	Total Recoverable Zinc	0.75 (30-day avg.)	0.237 (30-day avg.)
07/95	Total Recoverable Cadmium	0.0125 (30-day avg.)	0.0004 (30-day avg.)
07/95	Total Recoverable Zinc	2.85 (30-day avg.)	0.237 (30-day avg.)
09/95	Total Recoverable Cadmium	0.0025 (30-day avg.)	0.0004 (30-day avg.)
09/95	Total Recoverable Zinc	0.37 (30-day avg.)	0.237 (30-day avg.)

Anaconda purchased the property in 1980 and in response to the outstanding NOV and CDO, carried out several environmental efforts such as building a water treatment plant at the St. Louis Tunnel discharge, capping wells, plugging adits, and stabilizing tailings and treatment ponds (Anaconda Minerals Company (AMC) 1994).

The EPA collected surface water and sediment samples from Silver Creek and the Dolores River during a site inspection conducted in November 1984. Analytical results indicated that the surface

water and sediments contained elevated concentrations of arsenic, cadmium, copper, iron, lead, manganese and zinc (Ecology and Environment (E&E) 1985).

Rico Development Corporation purchased the property in 1988 (CDPHE 1988). NOV's and CDOs were issued to Rico Development Corporation in 1990 for violations of the NPDES permitted discharge levels of lead and silver standards, in 1993 for violations of the silver standards, and in 1994 for violations of silver, lead and zinc standards (CDPHE 1995; EPA 1994).

The U.S. Department of Interior, Bureau of Reclamation conducted surface water and sediment sampling in the Dolores River and its tributaries between 1989 and 1993. The results show Silver Creek to be a major, but not the only, source of mercury and other heavy metals in the upper Dolores River Basin (U.S. Department of the Interior, Bureau of Reclamation, undated).

The Atlantic Richfield Corporation (ARCO) has initiated a voluntary environmental site characterization of the town of Rico and surrounding area within the framework of the Colorado Voluntary Cleanup and Redevelopment Act (PTI Environmental Services and ESA Consultants 1995).

3.4 SITE GEOLOGY

Detailed information about the geology of the Rico, Colorado, area can be found in "Geology and Ore Deposits of the Rico District, Colorado," by Edwin T. McKnight (USGS 1974). The geology of the Rico District is extremely complex in detail. The dominant structure of the district is a faulted dome centered on a monzonite stock. Sedimentary strata exposed in the area are the Ouray and Leadville limestones, overlain by the Hermosa Formation, whose limestone beds are the source of the district's massive sulfide ore deposits. The youngest sedimentary strata in the Rico District is the red beds of the Cutler Formation. The lower slopes of the Rico District are generally covered by debris resulting from wash, talus and landslide processes (USGS 1974). Surface materials in the valley sides and bottoms are glacial or stream deposits (URS 1995c).

3.5 SITE HYDROGEOLOGY

A shallow unconfined aquifer is located in the glacial, stream, wash, talus and landslide debris found along the valley floors. Groundwater in the shallow aquifer would be greatly influenced by seasonal weather conditions and the nearby surface water bodies. Conductivity is assumed to be high, between 10^{-2} to 10^1 centimeters per second (cm/sec) (USGS 1987). Groundwater flow should follow the valley contours.

Deeper bedrock aquifers are found at the site. Several exploratory drill holes along the Dolores River portion of the site flowed water and were capped (AMC 1988; AMC 1994). Two exposed and several underwater geothermal springs are found along the Dolores River. Water quality data in Table 2 from the two exposed geothermal springs indicates a common source. Water flowing from these springs is depositing calcium carbonate and iron about the springs and there are visible geothermal deposits between the springs and the town of Rico (URS 1995a; URS 1995c).

TABLE 2
Geothermal Springs Water Quality (9-12-95)

	Water Temp. (°F)	pH (Std Units)	Conductivity (μ s/cm)	Flow (gal/min)
Hot Tub Spring	107.9	6.60	7,280	30-50
2nd Hot Spring	107.3	6.66	7,080	15-20

3.6 SITE HYDROLOGY

The Rico-Argentine site is located in the Dolores River Basin. The Dolores River and its tributary Silver Creek are the major surface water bodies in the area. The Dolores River flows to the south past the St. Louis Tunnel adit, the old sulfuric acid plant, the cyanide heap leach basins, the tailings piles, settling ponds and the NPDES Outfall 002 (Figure 2). Silver Creek flows from the east, past the old mill site and several tailings piles and through the town of Rico before joining

the Dolores River west of Rico (Figure 2). The 41-year annual mean flow on the Dolores River, approximately four miles below the town of Rico, is 136 cubic feet per second (cfs) and the upstream drainage basin encompasses 105 square miles (USGS 1993). The flow rate of Silver Creek was measured during the September 14, 1995, field work at sample station RA-SW/SE-07 (Figure 2). The average of three readings was 10.1 cfs and the upstream drainage basin of Silver Creek encompasses an estimated seven square miles (USGS 1976; URS 1995b).

3.7 SITE METEOROLOGY

The Rico-Argentine site is located in a semiarid climate zone. The mean annual precipitation, as totaled from the University of Delaware (UD) database, is 12.8 inches. The net annual precipitation as calculated from precipitation and evaporation data obtained from the UD is 4.1 inches (University of Delaware (UD) 1986). The 2-year, 24-hour rainfall event for the site is approximately 1.5 inches (Dunne and Leopold 1978).

4.0 FIELD OPERATIONS

Field operations for the Rico-Argentine ESI included the collections of groundwater, surface water, sediment, residential soil and source samples. Other tasks performed during the field operations at the site included wetlands characterization, stream flow measurements, interviews with local residents, characterization of thermal springs and measurement of field water quality parameters for non-sampled tributary streams of the Dolores River.

4.1 SAMPLE COLLECTION ACTIVITIES

Sampling activities included the collection of 45 samples, specifically 16 source, 1 groundwater, 11 stream surface water, 11 stream sediment and 6 residential soil samples. Additionally, 9 QA/QC samples plus a laboratory MS/MSD were collected. Table 3 lists the sample locations and rationale for each sample.

4.2 NON SAMPLE COLLECTION FIELD ACTIVITIES

The following non-sampling activities were conducted during the Rico-Argentine ESI (URS 1995b):

- Delineation and characterization of wetlands along the Dolores River for approximately one mile downstream of the confluence with Silver Creek.

Unconsolidated bottom land obligate wetlands were identified along the Dolores River downstream of the confluence with Silver Creek. Individual wetlands are less than one acre in size. Obligate emergent wetlands are located immediately south of Rico and approximately one mile south of the confluence of Silver Creek and the Dolores River, on the Dolores River between sample stations RA-07 and RA-08 (Figure 2). The wetlands on the west side of the Dolores River cover approximately two to three acres and the wetlands on the east side of the river are less than one acre in size.

- Measuring the flow of the NPDES Outfall 002 flume, Silver Creek and the Dolores River within the site boundaries on September 15, 1996. Site investigators employed a Marsh McBirney flow meter to measure these flows.

The flow of the NPDES Outfall 002 flume was measured and determined to be 6.25 cfs or approximately 540,000 cubic feet per day.

Three stream flow measurements were taken of Silver Creek at sample station RA-07 (Figure 2). These flow measurements were 10.35 cfs, 11.00 cfs, and 8.96 cfs. The average of these three readings is 10.1 cfs, or approximately 872,000 cubic feet per day.

The flow of the Dolores River was measured and determined from a single measurement taken between sample stations RA-02 and RA-03 (Figure 2). The flow was measured at

48.16 cfs or approximately 4,160,000 cubic feet per day. This flow measurement compares well with the flow published for the U.S. Geological Survey's (USGS's) Montelores Bridge gauging station downstream of Rico (Figure 2) which for September 15, 1993 was 51 cfs and for September 15, 1994, was 69 cfs (USGS 1993; USGS 1994).

- Interviewing local residents to determine if any anecdotal evidence could be discovered concerning use of mine tailings as fill or construction material in the town of Rico.

The field teams interviewed over a dozen local residents, many of whom have lived in Rico for decades. No construction or fill materials were positively identified by local residents as derived from mine tailings. Material which the residents or field crews believed were characteristic of mine tailings were preferentially sampled.

- Characterization of thermal springs by measuring flow and the field parameters of pH, conductivity and water temperature.

Field water quality readings were taken and flow estimated for the two subaerial thermal springs located at the site (Table 2). Similar water quality parameters indicate a common source. Several other hot springs were noted to be bubbling through ponds located south of the settling ponds.

- Measuring field water quality parameters of pH, conductivity and water temperature of six tributary streams entering the Dolores River below the town of Rico, Colorado, as a screen for unusual conditions which would trigger sampling.

All tributary streams exhibited normal ranges of pH, conductivity and temperature. No opportunity sampling of the tributaries was required.

5.0 ANALYTICAL DATA

5.1 DATA VALIDATION AND INTERPRETATION

The sample data collected during this ESI was reviewed using the HRS guidelines for analytical interpretation (Office of the Federal Register 1990). As reported in the analytical results in Tables 4 through 21, elevated concentrations of contaminants, as noted by a star (★), are determined by sample concentrations based on the following:

- If the sample concentrations are greater than or equal to three times the highest background sample concentrations and greater than or equal to five times the blank concentrations and greater than or equal to the sample quantitation limit (SQL); and
- If not detected in background or blank samples, the sample concentrations are greater than or equal to the SQL.

All data analyzed by the CLP RAS laboratories were validated by the Environmental Services Assistance Team (ESAT). All data are acceptable for use as qualified in the data validation report. The complete data validation report, laboratory forms and SQL calculations are located in Appendix D.

5.2 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

The results of QA/QC samples are presented in Tables 20 and 21. The inorganic analyses of field QA/QC samples included rinsate samples and indicate that the decontamination procedures were effective (Table 20). There are no confirmed detections of inorganic compounds that are above the Contract Required Quantitation Level (CRQL). The organic analyses of QA/QC samples included trip and rinsate blanks collected from de-ionized water in the field (Table 21). The QA/QC sample results presented in Table 21 show only detections of acetone and chloroform

which are common laboratory contaminants. These laboratory contaminants have been corrected for in the final analytical results.

6.0 SOURCE CHARACTERIZATION

6.1 SOURCE SAMPLE LOCATIONS

Source Samples were collected from the two abandoned cyanide leach pits along the Dolores River (RA-WSO-01 and RA-WSO-02), a spring flowing from beneath the abandoned cyanide leach pits (RA-WSW-09), the St. Louis Tunnel outfall (RA-WGW-01), the hot-tub geothermal spring (RA-WGW-02) (Photo 5), the uppermost settling pond (RA-WSW-01/RA-WSE-01) (Photo 1), the lowermost settling pond (RA-WSW-02/RA-WSE-02), the drainage ditch between the upper settling ponds and the Dolores River (RA-WSW-03/RA-WSE-03) (Photo 4), the stained soil adjacent to a fuel tank at the mill site (RA-WSO-08), the tailings piles along upper Silver Creek, just below the old mill building (RA-WSO-03 and RA-WSO-04) (Photo 2), tailings at the confluence of Silver Creek and the Dolores River (RA-WSO-05), and from two tailings piles along the Dolores River south of Rico (RA-WSO-06 and RA WSO-07) (Photos 12 and 13). Please refer to Figure 2 for the exact sample locations and to Table 3 for sample rationale.

The source samples can be divided into three different groups: soils and tailings along Silver Creek and the Dolores River; the tailings ponds along the Dolores River; and the groundwater sources. The background for inorganic and organic soil parameters are found in Tables 9 and 10, as background sample RA-SO-01. Background for inorganic and organic surface water and sediment parameters are found in Tables 14 through 19 as background samples RA-SW-01 (Dolores River) and RA-SW-05 (Silver Creek). Background for inorganic and organic groundwater parameters can be found in Tables 10 and 11 as background sample RA-GW-01.

Source areas are posted but are not secured from public access. There are several locations along Silver Creek and the Dolores River where tailings were noted to be slumping into surface water

bodies. The settling ponds along the Dolores River are in good condition and no evidence of a spill was located during the field work (URS 1995b).

6.2 SOURCE ANALYTICAL RESULTS

Source samples contained a total of six VOCs. Acetone, carbon disulfide, 2-butanone, 2-hexanone, tetrachloroethene, and toluene were all detected in source soils and tailings (Table 5). Only acetone and 2-butanone were detected, in a single sample, above the method detection limit. This sample was an opportunity sample from underneath a leaking fuel tank at the Silver Creek Mill site. A single acetone detection below the method detection limit, was reported in the uppermost settling pond (Table 7).

Source samples contained a total of 12 SVOCs. Chrysene, fluoranthene, bis(2-ethylhexyl) phthalate, di-n-octylphthalate, butylbenzylphthalate, di-n-butylphthalate, pyrene, phenanthrene, benzo (a) anthracene, benzo (b) fluoranthene, benzo (a) pyrene, and phenol were all detected below the method detection limit and flagged as estimated by the validator (Tables 5 and 7).

Source samples contained a total of 10 pesticides. Aldrin was detected in three samples below the method detection limit (Tables 5 and 7). All other pesticides were detected in the opportunity soil sample (RA-WSO-08, Table 5) from beneath a leaking fuel tank. The pesticides detected are aldrin, endosulfan II, endrin aldehyde, endrin ketone, heptachlor, gamma-Chlordane, 4,4'-DDE, 4,4'DDD, endosulfan sulfate, and methoxychlor. All detections were below the method detection limit except endrin ketone, 4,4'DDE and 4,4'DDD (Table 5).

Source samples were analyzed for cyanide. Background for cyanide in the Rico area is approximately 0.5 parts per million (ppm). Source samples from the Rico-Argentine site can be divided into two groups, one group that is near background and one group that is approximately 10 times background. Source sediment/soil samples from the uppermost cyanide leach pit (RA-WSO-01), the tailings piles along Silver Creek (RA-WSO-03 and RA-WSO-04), and the

uppermost settling pond (RA-WSE-01) all recorded cyanide levels greater than background and are reported as elevated concentrations (Tables 4 and 6).

Source samples that were analyzed for inorganic analytes other than cyanide indicated elevated concentrations above the background for aluminum, antimony, arsenic, barium, cadmium, calcium, chromium, copper, iron, lead, mercury, nickel, selenium, silver, thallium and zinc (Tables 4 and 6). The analytical results were generally between approximately two to ten times background and are characteristic of mining waste material. Most of the elevated readings were from the tailings piles along Silver Creek and the Dolores River where cadmium, calcium, copper, iron, lead, silver and zinc occurred in most samples at between five to ten times background. There appears to be no discernable difference between the tailings along Silver Creek and the tailings along the Dolores River. The sample from the upper cyanide leach pit has elevated concentrations from background of aluminum, chromium, iron, lead, nickel and silver and the sample from the lower cyanide leach pit has slightly elevated concentrations from background of cadmium, copper, iron and nickel (Table 6). The samples from the settling ponds indicate that all the settling pond water and sediments have elevated concentrations of calcium. Calcium is used in the water treatment process to reduce the acidity of the mine water outfall (Anaconda Minerals Company 1994). Sediment in the uppermost (first) settling pond contains elevated concentrations of aluminum, antimony, arsenic, cadmium, calcium, copper, and lead; and the aqueous sample from the uppermost settling pond contains elevated levels of calcium and copper (Table 6).

7.0 GROUNDWATER PATHWAY

7.1 GROUNDWATER SAMPLE LOCATIONS

Only one groundwater sample was collected during this ESI. This groundwater sample was collected from the domestic well at the Rico Ranger Station, northwest of the site. Please refer to Figure 2 for the exact sample location and to Table 2 for the sample rationale. The sample was specifically collected from the spigot used as a source of water for the trailer where the summer

staff lives on site. The well draws water from valley fill talus, landslide, and alluvial material, and is across the Dolores River (west) and topographically above the site (URS 1995c).

7.2 GROUNDWATER ANALYTICAL RESULTS AND TARGETS

Analytical results of the groundwater sample did not reveal the presence of any organic compounds (Table 9). Analytical results of the inorganic samples, both total and dissolved metals, show detectable concentrations of barium, calcium, magnesium, manganese, potassium, sodium and zinc (Table 8). The detections and concentrations of inorganics detected in the groundwater well do not indicate contamination or contact with the source areas of the Rico-Argentine site.

8.0 RESIDENTIAL SOIL EXPOSURE PATHWAY

8.1 RESIDENTIAL SOIL SAMPLE LOCATIONS

Residential soil samples were collected from six properties within the town of Rico (Photos 7, 8, 9, 10, and 11). Please refer to Figure 2 and Table 3 for exact sample locations and rationale. Signed access agreements were obtained from all property owners before the sample was taken. Samples were taken from areas on the properties that the field crew or residents believed could potentially contain fill material derived from local mine workings.

8.2 RESIDENTIAL SOIL ANALYTICAL RESULTS AND TARGETS

There were no detections of VOCs in any of the residential soil samples (Table 9). There were detections of 17 SVOCs, primarily in samples RA-SO-02, RA-SO-04 and RA-SO-05, and estimated detections of three SVOCs were made in sample RA-SO-06. The compounds detected were generally qualified as estimated, except for detections at RA-SO-02, because quality control criteria were not met. Minor estimated detections of three SVOCs were made in sample RA-SO-06. The compounds positively identified from sample RA-SO-02 are fluoranthene,

pyrene, benzo (a) anthracene, chrysene, benzo (b) fluoranthene, benzo (k) fluoranthene, and benzo (a) pyrene.

Pesticides were detected in small amounts in all samples at low concentrations, which were estimated because quality control criteria were not met (Table 13). The pesticides detected were endosulfate, 4,4'-DDD, heptachlor, aldrin, heptachlor epoxide, endosulfan I, 4,4'-DDE, endrin, 4,4'-DDT, endrin ketone, alpha-chlordane, gamma-chlordane, and delta-BHC. These compounds could be expected to be present if commercial pesticides were used at these homes. These compounds are not associated with any Rico-Argentine source.

The inorganic results for two of the residential soil samples, RA-SO-03 and RA-SO-05, were very close to background. Four of the samples, RA-SO-02, RA-SO-04, RA-SO-06 and RA-SO-07, exhibited elevated concentrations of inorganics (Table 12). Elevated concentrations of copper were found in four samples. Elevated concentrations of lead were found in three samples, RA-SO-02, RA-SO-04, and RA-SO-07. Elevated concentrations of antimony, arsenic, manganese, mercury, silver, and zinc were found in at least two samples. Single detections, at separate locations, of cadmium, calcium, sodium, magnesium, vanadium and cyanide were recorded at elevated concentrations. When these locations are plotted on a map, the area defined by these elevated concentrations is approximately 776,000 square feet.

9.0 SURFACE WATER AND SEDIMENT PATHWAY

9.1 AQUEOUS AND SEDIMENT SAMPLE LOCATIONS

Three surface water and sediment samples, including a specific background sample, were collected from Silver Creek. Eight surface water and sediment samples, including a specific background sample, were collected from the Dolores River. Please refer to Figure 2 and Table 3 for exact sample locations and rationale.

The analytical results for each drainage are presented separately in the following discussions.

9.2 SILVER CREEK - AQUEOUS AND SEDIMENT ANALYTICAL RESULTS AND TARGETS

The background sample on Silver Creek (RA-SW/SE-05) was taken just upstream from the Rico municipal drinking water intake (Figure 1). A review of the analytical results presented in Tables 14 and 15 for Silver Creek and in Tables 16, 17, 18 and 19 for the Dolores River indicate that background conditions in both streams are similar.

Two qualified detections of tetrachloroethene (PCE) were made in sediment from Silver Creek (samples RA-SE-06 and RA-SE-07) (Table 15). Both detections are estimated values that are below the detection limit. There was also a very low level estimated detection of tetrachloroethene made in the source sample RA-WSO-03 (Table 5) which was taken from tailings along upper Silver Creek.

Phthalates were detected from the background sample (RA-SE-05) and from the sample just below the tailings (RA-SE-06). The detections are probably the result of sample collection or laboratory contamination. The sediment in Silver Creek tended to be composed of cobbles and boulders and considerable digging and picking were required to collect a sufficient quantity of fine-grained sediment for analysis.

Elevated concentrations of iron, manganese, and zinc were detected in both of the downstream aqueous samples (Table 14). The samplers noted that water seemed to be seeping from beneath the tailings pile directly into the creek. The concentrations decreased from the sample station just below the Silver Creek tailings piles (RA-SE-06) to the sample station located on Silver Creek just before the confluence with the Dolores River (RA-SW-07). Photo 3 shows the rusty-colored iron staining near the location of sample station RA-SW-06. The rusty-colored staining was less noticeable at RA-SW-07.

Elevated concentrations of 14 inorganics were detected from sediment at sample station RA-SE-06 (Table 14). The sampling crew noted that the stream was in direct contact with the tailings. It was

observed that tailings were slumping into the creek and that the creek bed appeared to be composed entirely of fine-grained tailings material derived from the tailings piles along the creek. Most of the elevated concentrations of inorganics were flagged by the validator as estimated because of the dilution required before the concentrated sample could be analyzed. Three metals were positively identified: beryllium, copper and selenium. Ten metals were identified and their quantity estimated because quality control criteria were not met. These 10 metals are aluminum, arsenic, cadmium, calcium, iron, lead, manganese, nickel, silver, and zinc.

An unqualified elevated concentration of copper was detected at RA-SE-07 located on Silver Creek just before the confluence with the Dolores River (Table 14). Elevated concentrations with estimated values were detected at RA-SE-07 for six inorganic compounds: arsenic, iron, lead, manganese, silver, and zinc. Elevated concentrations at the downstream Silver Creek sample location (RA-SE-07) were between one-half to one-tenth those of the upstream location (RA-SE-06). Seven inorganic compounds, aluminum, beryllium, cadmium, calcium, nickel, selenium, and cyanide that were detected at elevated concentrations at the upper sample station (RA-SE-06) were not detected at elevated concentrations at the lower sample station (RA-SE-07).

A survey of Silver Creek from the Rico municipal water intake to the confluence with the Dolores River (Figure 2) performed during the URS field sampling in September 1995 did not detect any wetlands or evidence of a fishery. The flow of Silver Creek was determined to be approximately 10.1 cfs (see Section 4.2). Concrete reinforced rip-rap was in place along the upper end of the tailings pile along the Silver Creek stream course. This containment prevented the tailings from entering the stream. There were no containment features along the more downstream reaches of Silver Creek where tailings were coming into direct contact with the stream, as noted at sample location RA-SW/SE-06 (URS 1995b).

9.3 DOLORES RIVER - AQUEOUS AND SEDIMENT ANALYTICAL RESULTS AND TARGETS

Eight aqueous and sediment samples were taken along the Dolores River. The background sample was taken on the east bank of the river, across from the Rico Ranger Station. There is no indication, either physical or analytical, that the background location is influenced by the site.

The aqueous organic samples (Table 17) indicated only one isolated very low level detection of carbon disulfide at RA-SW-09. This location is south (downstream) of Rico and adjacent to approximately one acre of wetlands (Figure 2). This single organic detection does not appear to be related to any identifiable source.

The aqueous inorganic samples (Table 16) present a more consistent picture. Iron and manganese are found at elevated concentrations in all Dolores River samples downstream of the background sample (RA-SW-01). Zinc is detected at elevated concentrations in all Dolores River aqueous samples below RA-SW-02 (Figure 2). The highest concentrations of iron, manganese, zinc and copper are also found in aqueous sample RA-SW-08. Iron at this location is 54 times background, manganese is 20 times background, zinc is 68 times background, and copper is 8 times background. These elevated concentrations cannot be traced directly back to Silver Creek or the Outfall 002 from the settling ponds, since concentrations actually decrease at the previous sample location on the Dolores River (RA-SW-04).

There are also elevated concentrations of aluminum from sample stations RA-SW-02 and RA-SW-08. These two stations report aluminum concentrations that are approximately ten times background and there is no apparent source for these concentrations. All other sample stations report aluminum readings near background (Table 16).

Organic sediment sample results from the Dolores River (Table 19) report an estimated result for tetrachloroethene at RA-SE-08. An elevated concentration of acetone is reported in the duplicate (RA-SE-11) and is probably due to laboratory contamination. Phthalates are reported at low concentrations in several samples and are probably the results of sample collection or laboratory contamination. 4-methylphenol is also estimated to be present below the detection limit in the most

downstream sample and in the duplicate of that sample (RA-SE-10 and RA-SE-11). This is most likely the result of laboratory contamination.

Elevated concentrations of inorganic compounds are recorded at two sample stations on the Dolores River, stations RA-SE-08 and RA-SE-09 (Table 19 and Figure 2). Both of these sample stations are located near tailings piles that are being actively eroded by the Dolores River (Photos 12 and 13). There are no elevated concentrations of inorganic compounds reported for any other sediment sample along the Dolores River (Table 18). Copper is positively identified at elevated concentrations at both sample stations. The copper in the sediment is elevated to 9 times background at sample station RA-SE-08 and to 5.5 times background at the next most downstream location, RA-SE-09. Lead, manganese, and zinc are all detected at estimated quantities, below the detection limit but above background, at RA-SE-08 and RA-SE-09. The concentrations of lead, manganese, and zinc in the sediment range from three to five times background..

There is substantial evidence of sport fishing along the Dolores River in the Rico area. The field sampling crews observed and interviewed several cold water trout fisherman, particularly below Rico, between sample stations RA-SE/SW-08 and RA-SE/SW-10 (URS 1995b).

The field crew also measured and classified several wetlands for one mile along the Dolores River between the confluence of Silver Creek with the Dolores River and RA-SW/SE-09 (see section 4.2). Several small wetlands (less than one acre) were noted for the first three-quarters of a mile. A larger palustrine scrub/shrub (obligate) wetland, approximately five acres in size, was documented between three-quarters of a mile and one mile downstream of the Silver Creek/Dolores River confluence (Figure 2).

10.0 SUMMARY

Field work conducted at the Rico Argentine site in Rico, Colorado, during the week of September 11 through September 15, 1995, involved the collection of samples for laboratory analyses and non-sampling site specific information. This information has been used in this report to evaluate pathways and associated targets to determine if the Rico Argentine site potentially impacts the environment or human health.

The air pathway was not evaluated during this site inspection because no evidence was discovered during the background research which would indicate that a potential release to the air pathway was possible.

No groundwater users were identified during the field work. The only groundwater well located was the background well at the Rico Ranger Station. Data collected for this site inspection was inconclusive regarding the groundwater pathway.

Soil samples were collected from six residences. Organic compounds found in the residential soil samples can not be directly attributed to the site and are most likely the result of activities occurring at each specific residence. Samples from four of the residences had elevated concentrations of metals, which indicate that tailings material, from an unspecified source, could have been used as fill on the property. These locations define the boundaries of an area that covers approximately 766,000 square feet.

Aqueous and sediment samples were taken from Silver Creek and the Dolores River. The results of these samples indicate that there are localized incidents of metals entering the surface water and sediment of these streams from tailings that are not contained. Areas that appear to be potential sources of contamination are the lower part of the tailings piles on Silver Creek and the tailings piles that are being actively eroded along the Dolores River, south of Rico. These tailings piles appear to be a source for localized contamination that occurs immediately downstream of the tailings piles on Silver Creek and the Dolores River.

Source areas which are controlled by engineered containment features, such as the berm on the tailings on upper Silver Creek and the water treatment and settling pond system for the St. Louis Discharge do not appear to be the source for elevated concentration of metals in the surface waters and sediments of Silver Creek and the Dolores River. A review of the water quality data for the Dolores River ("pH on Dolores River" (Figure 3) and "Conductivity on Dolores River" (Figure 4) in Appendix A - Sample Activities Report) indicate that Outfall 002 and Silver Creek significantly influence water quality on the Dolores River at their respective points of confluence. A review of the analytical data from samples collected for this ESI indicates that Outfall 002 and Silver Creek are not the probable source of metals contamination in the Dolores River.

11.0 LIST OF REFERENCES

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URS Operating Services, Inc.
START, EPA Region VIII
Contract No. 68-W5-0031

Rico-Argentine ARR/ESI
Revision: 0
Date: 06/1996
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FIGURE 1
Site Location

FIGURE 2
Sample Locations

TABLE 3
Sample Locations and Rationale

Sample Matrix	Sample ID	Location	Rationale
Surface Water	RA-SW-01	Upstream of site influences on the Dolores River.	Establish background conditions on the Dolores River.
	RA-SW-02	Adjacent to tailings piles on the Dolores River.	Test for impacted fishery.
	RA-SW-03	Confluence of drainage from settling ponds and the Dolores River.	Test for impacted fishery.
	RA-SW-04	Confluence of Silver Creek and the Dolores River.	Test for impacted fishery.
	RA-SW-05	Upstream of site influences on Silver Creek.	Establish background conditions on Silver Creek.
	RA-SW-06	Downstream of tailings piles on Silver Creek.	Test for impacted fishery.
	RA-SW-07	Silver Creek, downstream of tailings pile in town of Rico.	Test for impacted fishery.
	RA-SW-08	1.7 miles downstream of Outfall 002 on the Dolores River.	Test for impacted fishery and/or segment of impacted wetlands downstream of Outfall 002.
	RA-SW-09	1.9 miles downstream of Outfall 002 on the Dolores River.	Test for impacted fishery and/or segment of impacted wetlands downstream of Outfall 002.
	RA-SW-10	2.8 miles downstream of Outfall 002 on the Dolores River.	Test for impacted fishery and/or segment of impacted wetlands downstream of Outfall 002.
	RA-SW-11	5.8 miles downstream of Outfall 002 on the Dolores River.	Test for impacted fishery and/or segment of impacted wetlands downstream of Outfall 002.
Sediment	RA-SE-01	Upstream of site influences on the Dolores River.	Establish background conditions on the Dolores River.
Sediment (continued)	RA-SE-02	Adjacent to tailings piles on the Dolores River.	Test for impacted fishery.

TABLE 3
Sample Locations and Rationale
(continued)

Sample Matrix	Sample ID	Location	Rationale
	RA-SE-03	Confluence of drainage from settling ponds and the Dolores River.	Test for impacted fishery.
	RA-SE-04	Confluence of Silver Creek and the Dolores River.	Test for impacted fishery.
	RA-SE-05	Upstream of site influences on Silver Creek.	Establish background conditions on Silver Creek.
	RA-SE-06	Downstream of tailings pile on Silver Creek.	Test for impacted fishery.
	RA-SE-07	Silver Creek, downstream of tailings pile in the town of Rico.	Test for impacted fishery.
	RA-SE-08	1.7 miles downstream of Outfall 002 on the Dolores River.	Test for impacted fishery and/or segment of impacted wetlands downstream of Outfall 002.
	RA-SE-09	1.9 miles downstream of Outfall 002 on the Dolores River.	Test for impacted fishery and/or segment of impacted wetlands downstream of Outfall 002.
	RA-SE-10	2.8 miles downstream of Outfall 002 on the Dolores River.	Test for impacted fishery and/or segment of impacted wetlands downstream of Outfall 002.
	RA-SE-11	5.3 miles downstream of Outfall 002 on the Dolores River.	Test for impacted fishery and/or segment of impacted wetlands downstream of Outfall 002.
Surface Soil	RA-SO-01	Sample from off-site location, outside of site influences.	Establish background soil conditions.
	RA-SO-02	Opportunity soil sample from residential property in Rico.	Establish contaminated soil source area.
Surface Soil (continued)	RA-SO-03	Opportunity soil sample from residential property in Rico.	Establish contaminated soil source area.
	RA-SO-04	Opportunity soil sample from residential property in Rico.	Establish contaminated soil source area.

TABLE 3
Sample Locations and Rationale

Sample Matrix	Sample ID	Location	Rationale
	RA-WSO-07	Tailings along the Dolores River, one mile south of Rico.	Characterize tailings pile.
	RA-WSO-08	Opportunity soil sample from soil in the vicinity of fuel tank at the mill site.	Characterize former contents of empty tank.
	RA-WSW-01	Aqueous sample from uppermost settling pond adjacent to the Dolores River.	Characterize contents of settling pond.
	RA-WSW-02	Aqueous sample from lowermost settling pond adjacent to the Dolores River.	Characterize contents of settling pond.
	RA-WSW-03	Aqueous sample from ditch adjacent to upper settling ponds along the Dolores River.	Characterize contents of ditch.
	RA-WSE-01	Sediment sample from uppermost settling pond adjacent to the Dolores River.	Characterize contents of settling pond.
	RA-WSE-02	Sediment sample from lowermost settling pond adjacent to the Dolores River.	Characterize contents of settling pond.
	RA-WSE-03	Sediment sample from ditch adjacent to upper settling ponds along the Dolores River.	Characterize contents of ditch.
QA/QC	RA-SW-18	VOA Trip Blank Sample	Document contamination introduced during sample handling and shipping.
	RA-SW-19	VOA Trip Blank Sample	Document contamination introduced during sample handling and shipping.

TABLE 3
Sample Locations and Rationale

Sample Matrix	Sample ID	Location	Rationale
	RA-SO-05	Opportunity soil sample from residential property in Rico.	Establish contaminated soil source area.
	RA-SO-06	Opportunity soil sample from residential property in Rico.	Establish contaminated soil source area.
Groundwater	RA-GW-01	Groundwater sample from upgradient well in the Dolores River Valley.	Establish background conditions in same aquifer as downgradient groundwater sample.
Adit Sample	RA-WGW-01	Source sample from the outfall of the St. Louis Tunnel.	Characterize mine discharge from St. Louis Tunnel.
Hot Spring Sample	RA-WGW-02	Surface water sample from geothermal spring adjacent to settling pond.	Characterize public use geothermal spring.
Source Characterization	RA-WSO-01	Soil sample from abandoned cyanide leach pits along the Dolores River.	Characterize cyanide leach pits.
	RA-WSO-02	Soil sample from abandoned cyanide leach pits along the Dolores River.	Characterize cyanide leach pits.
	RA-WSO-03	Tailings piles along Silver Creek.	Characterize tailings piles.
	RA-WSO-04	Tailings piles along Silver Creek.	Characterize tailings piles.
Source Characterization (continued)	RA-WSO-05	Tailings pile at confluence of Silver Creek and the Dolores River.	Characterize tailings pile.
	RA-WSO-06	Tailings pile along the Dolores River, south of Rico.	Characterize tailings pile.

TABLE 3
Sample Locations and Rationale

Sample Matrix	Sample ID	Location	Rationale
	RA-SW-20	VOA Trip Blank Sample	Document contamination introduced during sample handling and shipping.
	RA-SW-22	Rinsate Blank Sample	Document thoroughness of decontamination procedures on soil sampling equipment
	RA-SW-23	Rinsate Blank Sample	Document thoroughness of decontamination procedures on soil sampling equipment
	RA-SW-24	Rinsate Blank Sample	Document thoroughness of decontamination procedures on sediment sampling equipment.
	RA-SW-25	Rinsate Blank Sample	Document thoroughness of decontamination procedures on soil sampling equipment.
	RA-SW-26	Duplicate of RA-SW-04	Determine the precision of sample collection procedures and laboratory analyses.
	RA-SW-27	Duplicate of RA-SW-11	Determine the precision of sample collection procedures and laboratory analyses.
	RA-SW-93	VOA Trip Blank Sample	Document contamination introduced during sample handling and shipping.

Poor Quality Original

**The following document images
have been scanned from the best
available original copy.**

TABLE 6
Source Aqueous and Sediment Inorganic Sample Results from Settling Ponds
Concentrations in $\mu\text{g/l}$ or mg/kg

Sample ID: Case #: Traffic Report #: Location: Location Description:	2352713 24008 MHDA95 RA-WSE-01 Sediment sample from uppermost settling pond adjacent to the Dolores River (mg/kg)	2352711 24008 MHDA93 RA-WSW-01 Aqueous sample from uppermost settling pond adjacent to the Dolores River ($\mu\text{g/l}$)	2352707 24008 MHDA89 RA-WSE-02 Sediment sample from lowermost settling pond adjacent to the Dolores River (mg/kg)	2352706 24008 MHDA88 RA-WSW-02 Aqueous sample from lowermost settling pond adjacent to the Dolores River ($\mu\text{g/l}$)	2352709 24008 MHDA91 RA-WSE-03 Sediment sample from ditch adjacent to upper settling ponds along the Dolores River (mg/kg)	2352708 24008 MHDA92 RA-WSW-03 Aqueous sample from ditch adjacent to upper settling ponds along the Dolores River ($\mu\text{g/l}$)
Aluminum (Al)	25500 J	3860 J	8560 J	53.3 J	3620 J	2
Antimony (Sb)	19.6 UJ	3.0 U	1.8 UJ	3.0 U	0.88 U	
Arsenic (As)	49.4	[6.9]	12.9	2.0 U	10.6	
Barium (Ba)	[94.5]	[23.9]	[44.7]	[13.1]	[54.2]	
Beryllium (Be)	13.6	2.3 UJ	1.3 U	1.0 U	0.48 UJ	
Cadmium (Cd)	227	26.4	10.9	[1.9]	[0.32]	
Calcium (Ca)	153000 J	215000	13700 J	206000	5700 J	
Chromium (Cr)	[15.5]	[1.9]	13.5	1.0 U	4.2	
Cobalt (Co)	[40.5]	[5.2]	[12.5]	1.0 U	[4.4]	
Copper (Cu)	4230 J	453	69.2 J	[4.2]	12.8 J	
Iron (Fe)	195000 J	28500	19800 J	297	12300 J	
Lead (Pb)	838 J	172	137 J	1.0 U	19.0 J	
Magnesium (Mg)	[8470]	19800	7530	20200	2290	
Manganese (Mn)	18600 J	2950	3900 J	820	483 J	
Mercury (Hg)	1.2 U	0.20 U	0.13 U	0.20 U	0.15 U	
Nickel (Ni)	[63.7]	[10.0]	20.2	[2.4]	[8.2]	
Potassium (K)	[8050]	5050	1660	[4830]	[1240]	
Selenium (Se)	4.8 U	2.0 U	0.54 U	2.0 U	0.59 U	
Silver (Ag)	[8.0]	[1.2]	[2.3]	1.0 U	0.29 U	
Sodium (Na)	2480 UJ	9010	38.0 U	9110	75.8 UJ	
Thallium (Tl)	4.8 U	[4.3]	0.54 U	[3.4]	0.59 U	
Vanadium (V)	[9.0]	[1.5]	[10.5]	1.0 U	[10.1]	
Zinc (Zn)	43900 J	5660	1300 J	351	79.3 J	
Cyanide (CN)	[3.1]	3.0 U	0.20 U	3.0 U	0.22 U	

J The associated numerical value is an estimated quantity because quality control criteria were not met.

U The analyte was not detected at reported concentration (qualified by laboratory software).

UJ The associated numerical value is an estimated quantity because quality control criteria were not met. The analyte was not detected.

J The associated numerical value was detected below the CRDL, but greater than the method detection limit and is therefore an estimate (qualified by laboratory software). Presence of the compound is reliable.

EXHIBIT 1B

ERIC JAMES HEIL

RICO TOWN MANAGER AND ATTORNEY

4-4-00

Monica Heimdal
Region VIII ENF-T
999 18th Street, Suite 500
Denver, CO 80202-2466

RE: St. Louis Tunnel settling ponds

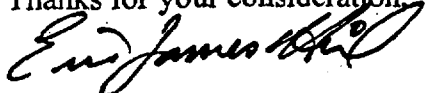
Hi Monica,

Enclosed are photos taken on Sunday, March 26th of the upper most settling pond for the St. Louis tunnel discharge breaching into the Dolores River. Again, I'm expressing concern that total abandonment of maintaining the settling ponds is not only jeopardizing their effectiveness but also their very integrity. Spring run-off will be occurring in the next several weeks. I believe the situation requires immediate attention in order to protect this priority one classification stretch of river.

In addition, we like to schedule a community meeting with EPA and State officials, and State representatives if possible, sometime in June to discuss the current situation and progress of the Dept. of Justice action. Please let me know if you or other EPA representatives would be willing to attend. Finally, the Town is beginning to work with a local water shed forum. I believe it would be very beneficial to institute a more complete sampling and monitoring program around Rico which would collect data during high and low flows at different times of the year. Besides the mine pollution, Rico is the only significant private land area in the upper east fork of the Dolores watershed so most potential growth impacts to the river will probably occur in this area.

Finally, I've enclosed a recent article I read regarding pollution permit monitoring and enforcement.

Thanks for your consideration.



Eric James Heil

Cc: Annette Quill, Attorney General's Office
Greg Brandt, CDOHE
Governor Owen's Office
Kay Alexander, State Representative
Jim Dyer, State Senator
Rico Town Board of Trustees

Received
Office of Enforcement

APR - 6 2000

Compliance & Env. Justice

EXHIBIT 1C



EXHIBIT 1D



EXHIBIT 1E



EXHIBIT 2

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Civil Action No.

IN THE MATTER OF

RICO ARGENTINE MINE:
ST. LOUIS TUNNEL AND
ASSOCIATED TREATMENT PONDS,
RICO, COLORADO

DECLARATION OF SHELDON H. MULLER

I, Sheldon H. Muller, make the within Declaration pursuant to 28 U.S.C. § 1746.

1. I make this declaration in support of the APPLICATION OF THE UNITED STATES FOR WARRANT TO DETERMINE THE NEED FOR AND TO UNDERTAKE RESPONSE ACTION PURSUANT TO THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT, 42 U.S.C. §§ 9601 ET SEQ. ("Application").

2. The documents and photographs attached hereto as Exhibits 2A through 2F are true and accurate copies of the originals.

DECLARATION

I, Sheldon H. Muller, declare under penalty of perjury that the foregoing DECLARATION OF SHELDON H. MULLER is true and correct.

Executed on this 18TH day of April, 2000.



SHELDON H. MULLER

EXHIBIT 2A



ericheil@frontier.net on 04/11/2000 12:23:35 PM

To: Sheldon Muller/ENF/R8/USEPA/US@EPA, annette.quill@state.co.us

cc:

Subject Pictures of St. Louis

:

Here is close up of west bank of upper settling pond taken on 4-11-00. Significant erosion has been occurring to the left and more so to the right. Erosion on right hand side appears to have increased significantly from approx 3' wide by 1' deep to 2 1/2' deep by 5' wide within one weeks time.

Here is the trench Dennis and I dug on 4-10-00. This picture was taken approx. 9:45 a.m. on 4-11-00

This is west bank flowing at approximate 1:00 p.m. on 4-10-00 before trench was dug.



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- att3.jpg



- att4.jpg

EXHIBIT 2B

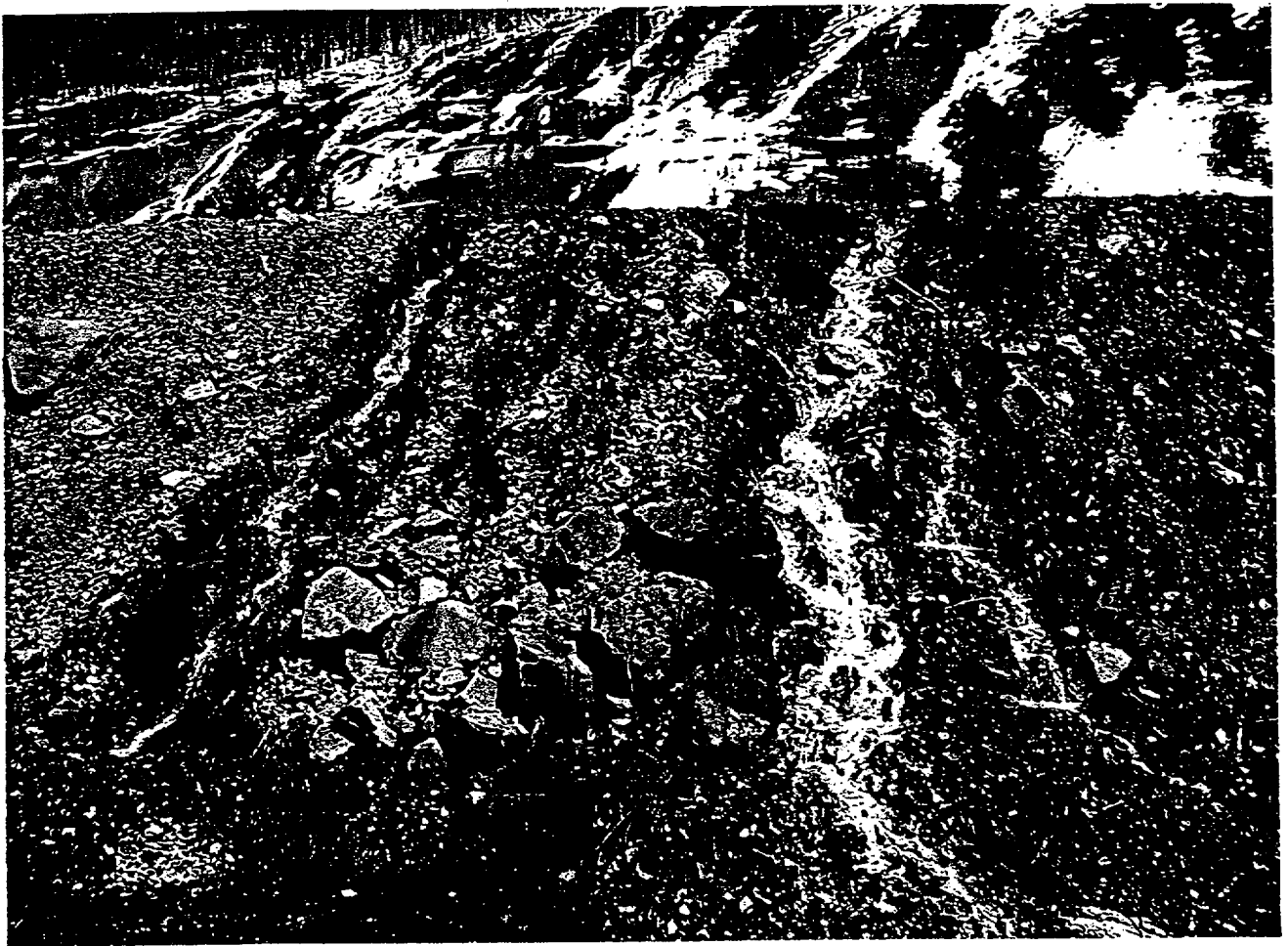


EXHIBIT 2C

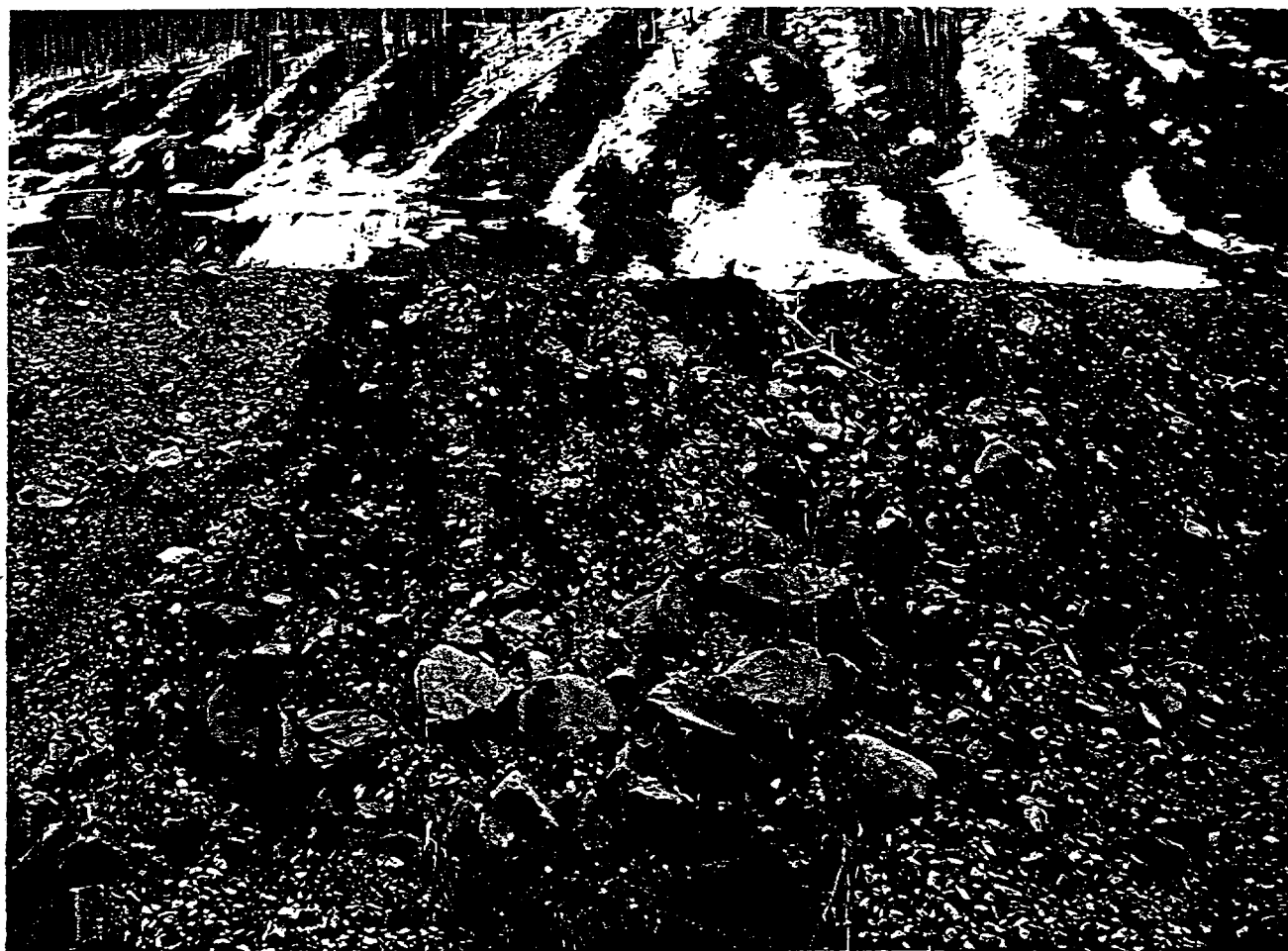


EXHIBIT 2D



EXHIBIT 2E



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

LEGAL ENFORCEMENT PROGRAM

999 18th STREET - SUITE 500

DENVER, COLORADO 80202-2466

FACSIMILE COVER

DATE: April 13, 2000

TO: Joshua Epel, Esq.

AGENCY/COMPANY: Gablehouse & Epel

CITY: STATE: MAIL CODE:

FAX NUMBER: (303) 572-3037 TEL #:

NUMBER OF PAGES (Including Cover Sheet): 3

FROM: Sheldon H. Muller

SENDER'S TELEPHONE NUMBER: (303) 312-6916

SENDER'S FAX NUMBER: (303) 312-6953

COMMENTS: Josh,

Please FAX to Wayne Webster and then have him sign and FAX back to me, or to you and then to me. Thank you for your help.

Sheldon

☐ HARD COPY TO FOLLOW
☒ HARD COPY WILL NOT BE SENT

SENDER:
DATE/TIME:

CONFIDENTIALITY NOTICE: THE DOCUMENT(S) ACCOMPANYING THIS FAX MAY CONTAIN CONFIDENTIAL INFORMATION WHICH IS LEGALLY PRIVILEGED. THE INFORMATION IS INTENDED ONLY FOR THE USE OF THE INTENDED RECIPIENT. IF YOU ARE NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISCLOSURE, COPYING, DISTRIBUTION OR THE TAKING OF ANY ACTION IN RELIANCE ON THE CONTENTS OF THE TELECOPIED INFORMATION EXCEPT IN DIRECT DELIVERY TO THE INTENDED RECIPIENT NAMED ABOVE IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS FAX IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE TO ARRANGE FOR RETURN OF THE ORIGINAL DOCUMENT(S) TO US



Printed on Recycled Paper

CONSENT FOR ACCESS TO PROPERTY

I, the undersigned, am the owner, its/their representative, or otherwise control the real property upon which are located one or more ponds that have been used to treat effluent from the St. Louis tunnel located at what is referred to as the Rico Argentine Mine in or near Rico, Colorado (hereinafter referred to as "the Property"). The United States Environmental Protection Agency (EPA) has requested access to my property pursuant to its response and enforcement responsibilities under the Comprehensive Environmental Response, Compensation and Liability Act, as amended (Superfund), 42 U.S.C. § 9601 et seq.

I consent to officers, employees, and authorized representatives of the EPA, including their authorized contractors, entering and having continued access to the Property in order to conduct a removal site assessment and, if necessary, a removal action designed to allow the effluent in the ponds to freely flow from one pond to the next. I further allow access to State officials who may accompany them. I understand that it is anticipated that the site assessment and, if necessary, the removal action, may last approximately 3-10 working days and will commence on or about April 14, 2000. Access is granted for the purpose of investigation, monitoring, surveying, testing and the undertaking of any action reasonably designed to eliminate the threat of release of effluent and sediments from the ponds into the Dolores River.

Site activities may include:

- Touring the property.
- Photographing on-site conditions.
- Selecting potential sampling locations.
- Collecting samples of soil, water sediment and air samples.
- Sampling source materials stored or disposed of onsite.
- Removing debris from the ponds.
- Installing devices to facilitate the movement of effluent from one pond to the next.

I understand that the work described above may involve among other things, disturbance of vegetation and soil on the Property.

It is my right to request split samples (a reasonable duplicate of materials samples) where an adequate quantity of sample is available. I understand that I am responsible for supplying necessary bottles at the time of sampling and making my own laboratory arrangements.

Property address or description:

Series of ponds located adjacent to the St. Louis Tunnel
Rico Argentine Mine
Rico, Colorado

This written permission is given by me voluntarily with knowledge of my right to refuse and without threats or promises of any kind.

(Signature)

(Date)

***** -COMM.JOURNAL- ***** DATE APR-13-2000 ***** TIME 17:35 *** P.01

MODE = TRANSMISSION

START=APR-13 17:34

END=APR-13 17:35

NO.	COM	ABBR/NTWK	STATION NAME/ TELEPHONE NO.	PAGES	PRG.NO.	PROGRAM NAME
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- *****

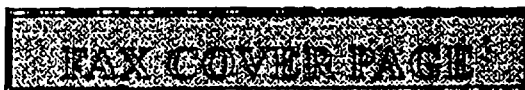
EXHIBIT 2F

GABLEHOUSE & EPEL, LLC

A Law Partnership Of Professional Corporations

1050 SEVENTEENTH STREET
SUITE 1730
DENVER, COLORADO 80265

(303) 572-0050
FAX (303) 572-3037



Date: April 14, 2000

TO (Organization): US EPA
ATTENTION: SHELDON MULLER, ESQ.
CITY: DENVER, CO
FAX NUMBER: (303) 312-6953

FROM: Joshua B. Epel

Number of pages (including this page): ____
Hard copy to follow? ____ yes ____ no

SHELDON:

ATTACHED IS MR. WEBSTER'S LIMITED ACCESS AGREEMENT. HE
WOULD NOT SIGN YOUR PROPOSED AGREEMENT.



WAYNE WEBSTER

E.P.A. OR CO. HEALTH DEPT. HAS
MY PERMISSION TO GO ON THE PROPERTY
IN QUESTION TO CATCH THE BEAVER AND
REMOVE DEBRIS FROM PONDS BROUGHT IN BY
THE BEAVER

Wayne Webster